

**Notice of Allowability**

Application No.

10/692,999

Examiner

Andrae S. Allison

Applicant(s)

RICE ET AL.

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on November 19, 2007.
2. ☒ The allowed claim(s) is/are 1-11, 14-16 and 18 now renumbered claims 1-15.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☒ SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☒ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application                                |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance             |
|  | 9. <input type="checkbox"/> Other _____  |

## **DETAILED ACTION**

### ***Response to Remarks***

1. The Office Action has been made issued in response to amendment filed November 19, 2007. Claims 1-11, and 14-18 are pending.

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ken Watson (Reg #: 58,952) on January 31, 2008.

The application has been amended as follows:

In claim 6, line 9, delete the semi-colon [;] and insert the phrase based on identifying fluctuations in multiple-pixel reflectivity of a speckle-spot pattern compared with non-vibratory areas of adjacent facial surfaces to identify the selected critical areas of the face;

Cancel claim 17.

In claim 18, line 2, replace the word "model" with "module".

***Allowance***

3. The following is an examiner's statement of reasons for allowance: The most pertinent prior art is Black et al (US Patent No.: 5,774, 591) and Reilly (NPL document titled: Application of Face and Gesture Recognition for Human-Computer Interaction). Black discloses a method for sensing selected emotions. Black teaches generating an image of substantially all of the face of a human subject ; processing the image to identify movements in selected critical areas of the face; comparing the identified movements in the selected critical areas with a database that associates movements in selected critical areas with specific emotional. However, Black does not expressly disclose implementing electronic speckle pattern interferometry that is a speckle-spot pattern of diffusely reflected coincident light generate an image of the face of the human subject and associated the movements with specific physical condition. Reilly discloses a novel interface based on face and gesture recognition that implement electronic speckle pattern interferometry that is a speckle-spot pattern of diffusely reflected coincident light generate an image of the face of the human subject. Note the discussion above, neither Black nor Reilly teach processing the image to identify movements in selected critical areas of the face based on identifying fluctuations in multiple-pixel reflectivity of the speckle-spot pattern compared with non-vibratory areas of adjacent facial surfaces. The examiner finds no reason or motivation to combine the above references in an obvious rejection thus placing the application in condition for allowance.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made part of the record and not relied upon is considered pertinent to applicant's disclosure.

Kunishige (US Patent No.: 5,268,729) is cited to teach a method for repeatedly measuring object distance.

Berenz et al (US Patent No.: 6,810,135) is cited to teach a method for optimized human detection.

Peck et al (US Patent No.: 6,959,135) is cited to teach a method for increasing the signal-to-noise in IR-based eye gaze trackers.

### ***Inquires***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrae S. Allison whose telephone number is (571) 270-1052. The examiner can normally be reached on Monday-Friday, 8:00 am - 5:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Meta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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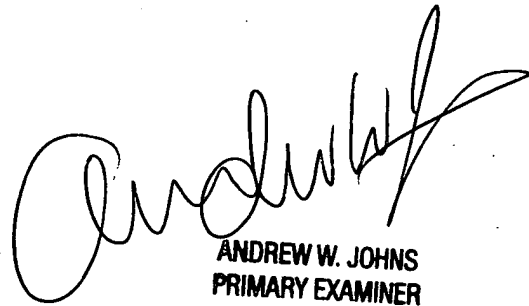
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrae Allison

January 31, 2008

A.A.



ANDREW W. JOHNS  
PRIMARY EXAMINER